SUPERFUND RESPONSE ACTION PRIORITY PANEL REVIEW FORM

Date Form Completed:

General Site Information

Region:	(Please Select) 2	City:	Lockport	State:	New York
CERCLIS EPA ID:	A269		CERCLIS Site Name:	Eighteen Mile Creek	
NPL Status: (P/F/D)	(Please Select) F		Year Listed to NPL:	2012	

Brief Site Description: *(Site Type, Current and Future Land Use, General Site Contaminant and Media Info, Site Area and Location information.)*

The Eighteen Mile Creek Site is located in Niagara County, New York, and includes contaminated sediments, soil and groundwater along Eighteen Mile Creek.

The headwaters of the Creek consist of an East and West Branch which begin immediately north of the New York State Barge Canal. Water from the Creek's East Branch originates at the spillway on the south side of the Canal, where it is directed northward underneath the Canal and the Mill Street Bridge through a culvert. Water from the West Branch originates from the dry dock on the north side of the Barge Canal and then flows northward. The East and West Branches converge just south of Clinton Street in Lockport. The Creek flows north for approximately 15 miles and discharges to Lake Ontario in Olcott, New York.

The Creek Corridor consists of a 4,000 foot long section of the Creek and adjacent properties in Lockport, New York. The Corridor includes nine residential properties along Water Street (the Residential Properties) and vacant land to the west, Upson Park to the south, Mill Street to the east, and the former Flintkote Company Plant property to the north. The topography of the area is relatively flat other than a steep downward slope toward the Creek and a millrace in the Creek, which bisects the former Flintkote Plant property.

To address the cleanup of the Site, the Site has been divided into three separate operable units (OUs). OU1 addresses contaminated soil at the nine residential properties and an old, dilapidated building located on the former Flintkote Plant property. EPA issued a ROD for OU1 on September 30, 2013. Of the nine residential parcels, six parcels are privately-owned and three parcels are owned by the City of Lockport. Homes are constructed on five of the six privately owned parcels. The ROD calls for acquisition of the six privately-owned properties and relocation of the residents at the five occupied properties, demolition of five houses on the five properties, excavation and off-Site disposal of contaminated soil from all nine residential properties, and backfilling with clean fill. The selected remedy also includes demolition of the former Flintkote Building at 300 Mill Street. OU2 will address contaminated sediments and soil in the remainder of the Creek Corridor and OU3 will address contaminated sediment in the Creek from the north end of the Corridor in Lockport to the Creek's discharge into Lake Ontario in Olcott, New York.

General Project Information

Type of Action:	(Please Select)Remedial	Site Charging SSID:	A269
Operable Unit:	01	CERCLIS Action RAT Code:	RD & RA

Is this the final action for the site that will result in a site construction completion?	☐ Yes	☒ No
Will implementation of this action result in the Environmental Indicator for Human Exposure being brought under control?	☐ Yes	☒ No

Response Action Summary

Describe briefly site activities conducted in the past or currently underway:

On September 30, 2013, EPA issued a Record of Decision for the first operable unit which addresses contaminated soil at nine residential properties and an old, dilapidated building in Lockport, NY. The remedy calls for acquisition of six of the nine properties that are privately-owned and relocation of the residents at five of the six properties, demolition of five houses on the five properties, excavation and off-Site disposal of contaminated soil from all nine Residential Properties (six parcels are privately-owned and three parcels are owned by the City of Lockport), and backfilling with clean fill. The selected remedy also includes demolition of the former Flintkote Building at 300 Mill Street. The demolition of the building would provide access to conduct subsurface sampling through the basement floor to confirm whether a contaminant source area beneath the building exists and to perform the necessary removal of asbestos-containing debris in the basement, including the boiler and associated piping.

Because the Creek periodically floods and deposits contaminated sediment on the properties, the remedy will be implemented in two phases. Property acquisitions, resident relocations and the home and building demolitions will be conducted first. The soil excavation work at the nine properties will be performed when a remedy for OU2 is implemented for the sediments and other contaminated properties in the Creek Corridor.

Specifically identify the discrete activities and site areas to be considered by this panel evaluation:

Remedial construction for the OU1 remedy. The remedy addresses potential exposure to contaminated soil at nine residential properties and calls for demolition of a building at the former Flintkote Building in Lockport, NY. Six of the nine properties are privately owned and three are owned by the City of Lockport. One of the private properties and all of the City-owned properties are vacant. The six private properties need to be acquired, the residents at the five private properties need to be relocated and their homes demolished along with the building at the former Flintfote property. Finally, the contaminated soil at all nine properties needs to be excavated for off-site disposal..

Briefly describe additional work remaining at the site for construction completion after completion of discrete activities being ranked:

Operable unit 2 will address contaminated sediments and several industrial and commercial properties in the Creek Corridor. OU3 will address contaminated sediment in the Creek from the north end of the Corridor in Lockport to its discharge to Lake Ontario in Olcott, New York. The RI/FS for OU2 and OU3 were initiated in September 2013. In addition, EPA performed additional soil sampling at nearby residential properties on Mill Street and Jackson Street in the spring of 2013 that revealed elevated levels of lead at two properties. EPA is currently developing a plan to conduct further soil sampling in this area. If the results from further soil sampling conducted by the EPA indicate that additional properties should be addressed under a future operable unit or response action, then the number of properties requiring soil remediation may increase. Excavation activities associated with soil remediation on these potential additional properties may necessitate temporary relocation of these residents.

Response Action Cost

Total Cost of Proposed Response Action:

($ amount should represent total funding need for new RA funding from national allowance above and beyond those funds anticipated to be utilized through special accounts or State Superfund Contracts.)

The total cost of the selected remedy for OU1 is $3,898,850.

Source of Proposed Response Action Cost Amount:

(ROD, 30%, 60%, 90% RD, Contract Bid, USACE estimate, etc…)

The September 30, 2013, Record of Decision and July 2013 supplemental feasibility study.

Breakout of Total Action Cost Planned Annual Need by Fiscal Year:

(If the estimated cost of the response action exceeds $10 million, please provide multiple funding scenarios for fiscal year needs; general planned annual need scenario, maximum funding scenario, and minimum funding scenario.)

FY 2014 Funding Need: Acquisition of six privately owned properties and relocation of residents at five of the six properties Exemption 5: DP ; Demolition of the former Flintkote building Exemption 5: DP

FY 2015 Funding Need: Demolition of the private homes at five of the Privately Owned Properties - Exemption 5: DP

FY 2017 Funding Need: Excavation of contaminated soil at the nine residential properties - Exemption 5: DP

Other information or assumptions associated with cost estimates?

The Flintkote building demolition assumes that the construction debris will be sorted and stockpiled on site until the remedy for OU2 is implemented since we believe that a considerable amount of concrete/stone can be crushed and subsequently used as backfill. The costs associated with acquisition of the residential properties and relocation of the residents are based on publicly available information at the time of remedy development. Six of the nine properties addressed by the remedy will require acquisition and five of the six have homes. EPA will not acquire the three of the nine properties as they are owned by the City of Lockport, New York. Most of the homes are owner-occupied; currently, one home is known to be tenant-occupied.

Readiness Criteria

1. Date State Superfund Contract or State Cooperative Agreement will be signed (Month)?

The New York State Department of Environmental Conservation (NYSDEC) plans on signing a State Superfund Contract for OU1 by December 2013.

2. If Non-Time Critical, is State cost sharing (provide details)?

Yes. The NYSDEC will provide a ten percent cost share for the OU1 remedy.

3. If Remedial Action, when will Remedial Design be 95% complete?

Two remedial designs will be necessary for the this phase of the OU1 remedy:

RD1 will address the acquisition and demolition of the residential properties. The 95% completion for this design is expected to be completed in the winter of 2013/2014.

RD 2 will address the demolition of the former Flintkote building. The 95% completion for this design is expected to be completed by the spring of 2014.

A separate remedial design will be developed for the excavation of the contaminated soils at the residential soils after a remedy is selected for OU2.

4. When will Region be able to obligate money to the site?

EPA expects a SSC with NYSDEC to be in the place and the 95% remedial design for the residential property acquisitions and resident relocations to be completed by the winter of 2013/2014, thereby enabling the Region to obligate the money at that time.

5. Estimate when on-site construction activities will begin:

Remedial action for OU1 would be conducted in three phases:

Phase 1- Property acquisitions, resident relocations estimated to begin as early as January 2014. Demolition of the

residential homes would be conducted after all of the residents have been relocated.

Phase 2 – Demolition of the former Flintkote building would begin in the spring of 2014.

Phase 3 - Excavation work to remove contaminated soil from the nine residential properties estimated to begin no sooner than 2016.

6. Has CERCLIS been updated to consistently reflect project cost/readiness information?

Yes.

Site/Project Name:	Eighteen Mile Creek Residential Property Acquisition, Resident Relocation and Building Demolition

Criteria #1 - RISKS TO HUMAN POPULATION EXPOSED (Weight Factor = 5)

Describe the exposure scenario(s) driving the risk and remedy. Include risk and exposure information on current/future use, on-site/off-site, media, exposure route, and receptors:

The risk drivers at the nine residential properties for OU1 were determined to be PCBs, chromium, and lead. Unacceptable cancer and non-cancer risks due to incidental ingestion and dermal contact with contaminated soil at the properties were determined for current residents and future residents and constructions workers at the properties.

Estimate the number of people reasonably anticipated to be exposed in the absence of any future EPA action for each medium for the following time frames:

MEDIUM	<2yrs	<10yrs	>10yrs
SL		2	8

Discuss the likelihood that the above exposures will occur:

Exposure to contaminated soil at five of the nine properties is likely.

Other Risk/Exposure Information?

Site/Project Name:	Eighteen Mile Creek Residential Property Acquisition, Resident Relocation and Demolition of Homes and Building

Criteria #2 – SITE/CONTAMINANT STABILITY (Weight Factor = 5)

Describe the means/likelihood that contamination could impact other areas/media given current containment:

The nine properties on Water Street are located on the bank of the Eighteen Mile creek. During heavy rain events, contaminated sediment from the Creek is deposited onto the properties and contaminated soil from the properties erodes into the Creek.

Are the contaminants contained in engineered structure(s) that currently prevents migration of contaminants? Is this structure sound and likely to maintain its integrity?

In September 2013, EPA Region 2's Superfund Removal Program conducted a non-time critical removal action involving the placement of six inches of soil/stone cover over the contaminated soil at the nine residential properties. The cover will act as a temporary barrier to prevent incidental exposure to the soil contaminants. The Removal Program will periodically inspect and maintain the cover until the contaminated soil is excavated and sent for off-site disposal.

Are the contaminants in a physical form that limits the potential to migrate from the site? Is this physical condition reversible or permanent?

The contaminants are present in the soil at the properties and may move with the soil into the Creek during rain events or by physical disturbance of the soil. This condition can be eliminated through remedy implementation.

Are there institutional physical controls that currently prevent exposure to contamination? How reliable is it estimated to be?

No institutional controls are in place.

Other information on site/contaminant stability?

A security fence is currently in place at the Flintkote property; however, there is evidence of trespasser activity. In addition to contaminated soil at the property, the building, which will be demolished as part of the OU1 remedy, is in a very poor, unstable condition and unsafe for entry. The full extent of contamination beneath the Flintkote building cannot be assessed until the building is demolished.

Site/Project Name:	Eighteen Mile Creek Residential Property Acquisition, Resident Relocation and Demolition of Homes and Building

Criteria #3 – CONTAMINANT CHARACTERISTICS (Weight Factor = 3)

(Concentration, toxicity, and volume or area contaminated above health based levels)

List Principle Contaminants (Please provide average and high concentrations.):

(Provide upper end concentration (e.g. 95% upper confidence level for the mean, as is used in a risk assessment, or maximum value [assuming it is not a true outlier], along with a measure of how values are distributed {e.g. standard deviation} or a central tendency values [e.g., average].)

Contaminant	***Media**	****Concentrations**
Lead	SL	4,630 ppm
PCBs	SL	17 ppm

*(*Media: AR – Air, SL – Soil, ST – Sediment, GW – Groundwater, SW – Surface Water)*

*(**Concentrations: Provide concentration measure used in the risk assessment and Record of Decision as the basis for the remedy.)*

Describe the characteristics of the contaminant with regards to its inherent toxicity and the significance of the concentrations and amount of the contaminant to site risk. *(Please include the clean up level of the contaminants discussed.)*

PCBs are classified by the EPA as probable human carcinogens based on sufficient evidence in animals and suggestive evidence in humans. PCBs are linked to other adverse health effects such as developmental effects, reduced birth weights, and reduced ability to fight infection.

Lead can be harmful when ingested or inhaled, particularly to children under the age of six. Lead poisoning can

cause a number of adverse human health effects, but is particularly detrimental to the neurological development of children.

Chromium occurs in the environment primarily in two valence states: trivalent chromium (Cr III) and hexavalent chromium (Cr VI). Chromium III is much less toxic than chromium (VI). The respiratory tract is the major target organ for the two states of chromium. Short term exposure to chromium IV can cause shortness of breath, coughing, and wheezing. Perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, and other respiratory effects have been noted from chronic exposure. Human studies have clearly established that inhaled chromium (VI) is a human carcinogen, resulting in an increased risk of lung cancer. Animal studies have shown chromium (VI) to cause lung tumors via inhalation exposure.

Describe any additional information on contaminant concentrations which could provide a better context for the distribution, amount, and/or extent of site contamination. *(e.g. frequency of detection/outlier concentrations, exposure point concentrations, maximum or average concentration values, etc.....)*

Other information on contaminant characteristics?

Site/Project Name:	Eighteen Mile Creek Residential Property Acquisition, Resident Relocation and Demolition of Homes and Building

Criteria #4 – THREAT TO SIGNIFICANT ENVIRONMENT (Weight Factor = 3)

(Endangered species or their critical habitats, sensitive environmental areas.)

Describe any observed or predicted adverse impacts on ecological receptors including their ecological significance, the likelihood of impacts occurring, and the estimated size of impacted area:

Neither a screening ecological risk assessment nor the ecological risk assessments have been conducted at the site.

Would natural recovery occur if no action was taken? ☐ Yes ☒ No
If yes, estimate how long this would take.

PCBs are stable compounds that resist degradation. Lead and chromium will not degrade and will remain in the soil.

Other information on threat to significant environment?

Site/Project Name:	Eighteen Mile Creek Residential Property Acquisition, Resident Relocation and Demolition of Homes and Building

Criteria #5 – PROGRAMMATIC CONSIDERATIONS (Weight Factor = 4)

(Innovative technologies, state/community acceptance, environmental justice, redevelopment, construction completion, economic redevelopment.)

Describe the degree to which the community accepts the response action.
The local community and elected officials have expressed strong support for the remedy that EPA selected for OU1. In August 2013, Senator Schumer visited the site prior to the release of the proposed plan and called upon EPA to relocate the residents. Local officials also advocated for the demolition of the Flintkote building in June 2010, before the site was listed on the NPL, because a young girl fell from a water tower at the property.
Describe the degree to which the State accepts the response action.
The NYSDEC reviewed EPA's selected remedy for the first operable unit and sent its written concurrence to EPA on September 30, 2013. In addition, the EPA consulted with both the Tuscarora and Tonawanda Seneca Nations on the proposed plan for the OU1 ROD. Continuing consultation with the Tuscarora Nation indicated that they did not disagree with the selected remedy.
Describe other programmatic considerations, e.g.; natural resource damage claim pending, Brownfields site, use of innovative technology, construction completion, economic redevelopment, environmental justice, etc…